

Android Development

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I. INTRODUCTION

Android is a software package for mobile devices such as tablet computers and smartphones. The goal of android project is to create a successful real-world product that improves the mobile experience for end users. There are many versions of android such as Lollipop, KitKat, Jelly Bean, Ice cream Sandwich, Froyo, Eclair, Donut etc. Android Studio replaced Eclipse as the main IDE for Android development. With this change Google has revamped the way developers can take advantage of all the Android development tools.

II. FEATURES OF ANDROID

- 1) It is open-source.
- 2) Anyone can customize the Android Platform.
- 3) There are a lot of mobile applications that can be chosen by the consumer.
- 4) It provides many interesting features like weather details, opening screen, live RSS (Really Simple Syndication) feeds etc.
- 5) It provides support for messaging services (SMS and MMS), web browser, storage (SQLite), connectivity (GSM, CDMA, Blue Tooth, Wi-Fi etc.), media, handset layout etc.

ANDROID USER INTERFACE

1)Level-1: CREATING A NEW PROJECT IN ANDROID STUDIO

One of the improvements in android is the setting up of a new project. It has never been easier to set up a new project, just click File>New>New Project and Android Studio will step you through exactly what you need to get started. Once this step is completed, click on File>New Module to create the actual Graphical User Interface of the app. This creates a new Module with a few folders and other files. Starting with the “manifests” folder which holds the AndroidManifest.xml. The file holds basic information including the name of the app that shows up on the device and any permissions that you define

2)Level-2: GRADLE

A Gradle is a build automation tool that sets out to be easier than traditional XML based project configurators and was made for large projects. One benefit is that it knows what parts of the build-tree are up to date, so

those parts do not have to be re-executed. Gradle is written in Java and Groovy, which makes it relatively easy to do the basic things needed for an application. Each module in a project will have its own Gradle file. Gradle provides an easy way to configure app details including build version and SDK version.

3)Level-3:

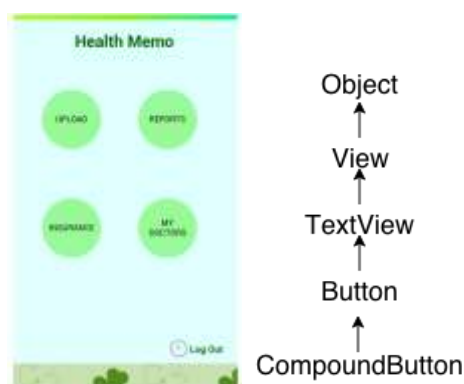
A)TOAST

Android Toast can be used to display information for the short period of time. A toast contains message to be displayed quickly and disappears after sometime. Android **Toast** class provides a handy way to show users alerts and these alerts are not persistent which means alert flashes on the screen for a few seconds and then disappears. The android.widget.Toast class is the subclass of java.lang.Object class.



B)BUTTON IN ANDROID

Android Button represents a push-button. The android.widget.Button is subclass of TextView class and CompoundButton is the subclass of Button class. There are different types of buttons in android such as RadioButton, ToggleButton, CompoundButton etc..



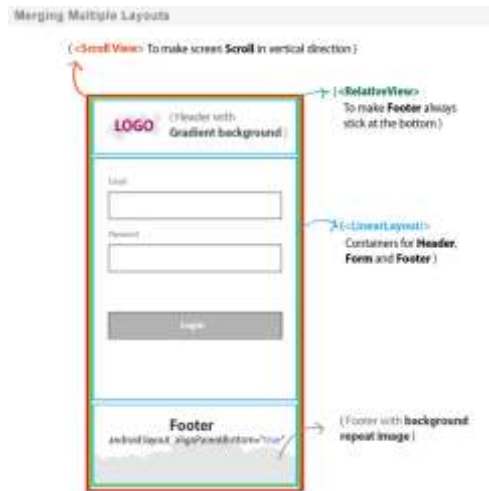
C)INTENT

Intents are asynchronous messages which allow application components to request functionality from

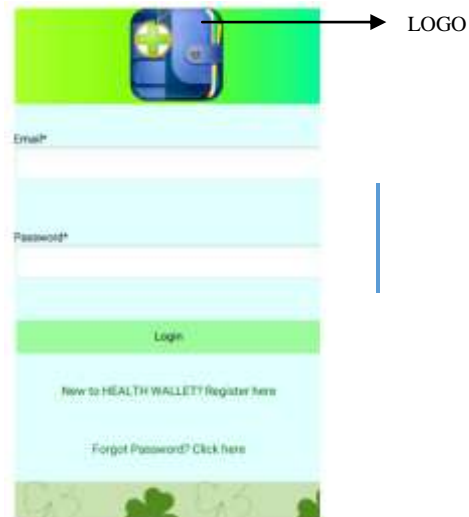
other Android components. Intents allow you to interact with components from the same applications as well as with components contributed by other applications. Intents are



objects of android.content.Intent type. Android supports explicit and implicit intents.



1. Create a new project by going to File ⇒ New Android Project. Fill all the details and name your activity as LoginActivity.
2. Once the project is created, create a new activity class in your project src directory and name it as RegisterActivity.java (Right Click on src/package ⇒ New ⇒ Class)
3. Now we need to create a layout for login screen. Under res/layouts create a new xml file and name it as login.xml (Right Click on res/layout ⇒ New ⇒ Android XML File)
4. In login screen we have header with a logo and gradient background color



DESIGNING LOGIN FORM

Login form contains two textfields with labels and a login button.



Full Name*

Email*

Password*

Mobile number*

Blood Group

Gender

Register New Account

Already have an account! Login here

DESIGNING THE REGISTRATION FORM

The registration form also had the same header and footer, but the form changes. The registration form contains fields like full name, email, password (if needed retype password).

REFERENCES

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